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# EXCAVATIONS OF A SECOND IRON AGE ENCLOSURE ON WINNALL DOWN, WINCHESTER, HAMPSHIRE, 2006

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## ABSTRACT

*Aerial survey during the 1970s identified two plough-levelled enclosures, 300m apart, on Winnall Down, Winchester. One of these, Winnall Down I, was excavated by Fasham (1985) in advance of the M3 motorway extension, and revealed evidence for intensive Bronze Age and Iron Age occupation. The adjacent enclosure, Winnall Down II, was not examined by Fasham however, and its date and relationship to Winnall Down I was not known. This paper details the results of a small-scale research excavation on Winnall Down II. It established that some occupation within both enclosures was contemporaneous and this arrangement implies complex agreements over land apportionment and agricultural activities.*

## INTRODUCTION

Aerial survey in advance of M3 motorway construction in the 1970s revealed two enclosures, 300m apart, on Winnall Down, 2 km north-east of Winchester (Fig. 1). The construction of Junction 9, meant that one of the enclosures, Winnall Down I (SU 4985 3035), was to be partly destroyed and this provided the opportunity for the total investigation of a small enclosure (Fasham 1985) and a large area to the west, surrounding what was then known as Easton Lane (Fasham *et al.* 1989). These excavations revealed extensive evidence of Bronze Age and Iron Age occupation extending over an area of 150,000 m$^2$.

There was no attempt by Fasham to examine the adjacent enclosure, Winnall Down II (SU 5023 3041), although he indicated that the full story could not be told while it remained unexcavated (Fasham 1985, 143). Its date and relationship to Winnall Down I was not known, although its similar size and shape suggested that it may be contemporary. Paired enclosure sites such as these, although relatively common in the Iron Age of southern Britain (e.g. Little Woodbury and Great Woodbury, Bersu 1940) have never been studied in any great detail. Consequently, several important questions have gone unanswered, most notably, were they occupied contemporaneously? Further issues to be addressed included establishing the nature and density of any occupation and whether this reflects a difference in function or social status of the individuals or family groups occupying the enclosures. The geophysical survey and excavation of Winnall Down II provided a perfect opportunity to conduct such an inter-site comparison, as part of a Ph.D. research project by the author, investigating the nature of Iron Age communities in Hampshire.

## GEOLOGY AND TOPOGRAPHY

Winnall Down is located within an area of undulating chalk downland at the western extreme of the South Downs, which reaches a height of 100m above sea level. The solid geology is dominated by Upper Chalk, while the drift geology shows a similar lack of variation with valley gravel deposits, normally consisting of flints and flint pebbles, and superficial deposits of alluvium and peat mostly confined to the floodplain of the river Itchen 800m to the west. The calcareous soils are relatively light and well drained, and are generally agriculturally productive. The dry valleys may have carried streams after the last Ice Age, but a falling water table has made surface water rare today.


Fig 1 Location of site

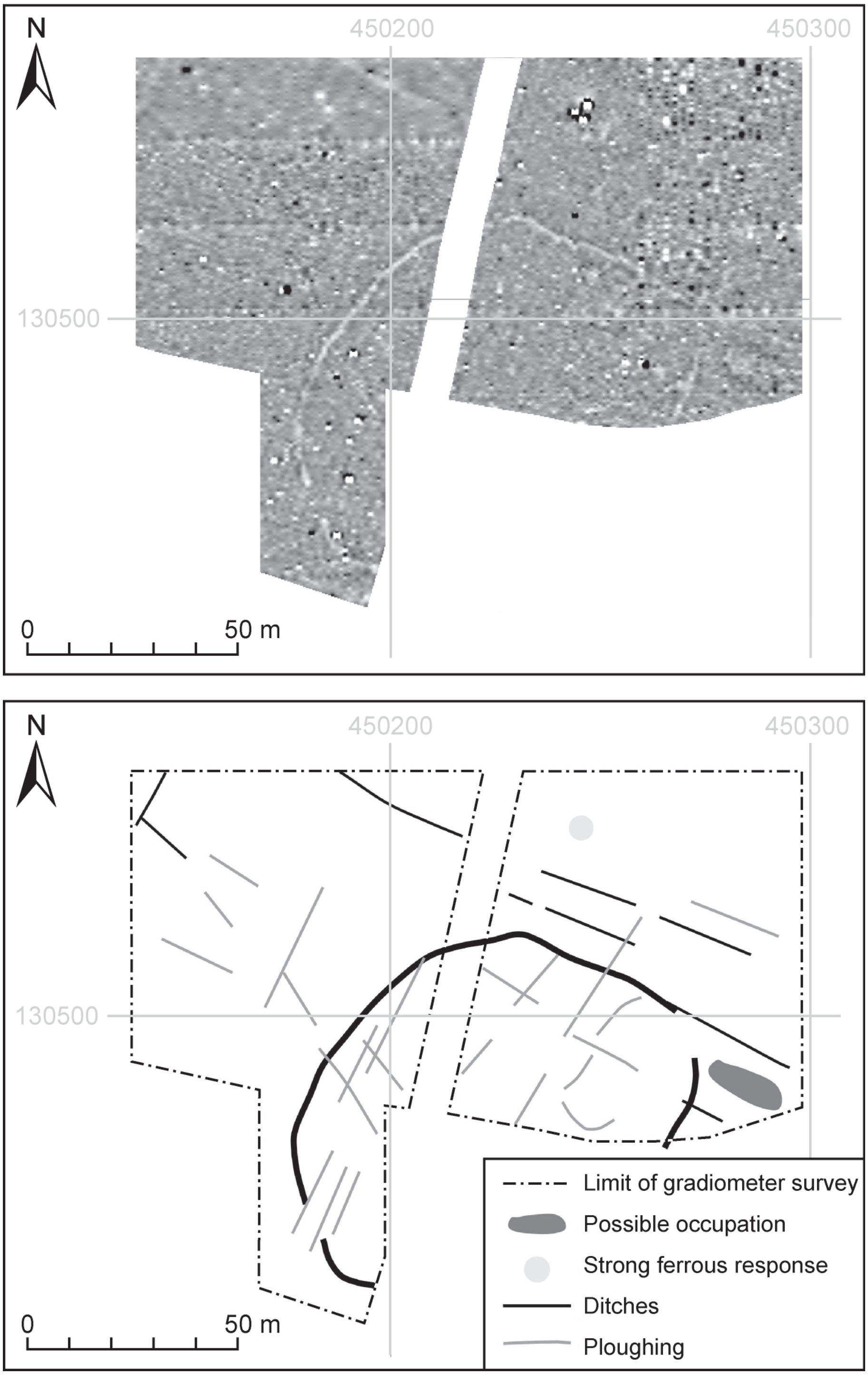


Fig 2 Results of magnetometer survey (top) and interpretation (bottom)

## THE GEOPHYSICAL SURVEY by Tim Young

A magnetic gradiometer survey was undertaken in advance of the excavation (Fig. 2). The variably poor data quality of the survey was caused by high vegetation misaligning the magnetometers and meant that much fine detail was lost. The survey area itself was irregular, bisected by a north-south low field boundary of tall grasses and other vegetation. The northern part was fallow arable land, with a variable growth of tall weeds. The main area was bordered to the south by the denser vegetation of a set-aside area, which was partly surveyed with a single magnetometer with a manual trigger and produced rather better quality data than the main paired instrument survey.

The main enclosure was identified as a single ditch, about 1 to 1.5m wide, with an entrance 7m wide in the south-west, enclosing an area of c. 7,800m$^2$. Details of the north-east angle were unclear, but it was possible that the ditch was continuous here. Other positive linear anomalies in this area may also be ditches, although they were much less distinct than the enclosure ditch.

An area 17m by 7m to the east of the north-east corner showed as a discrete, but slightly irregular area of elevated magnetic response, and is possibly an area of occupation material. A cluster of strong ferrous responses within an area of lesser variable signal are likely to be the result of recent activity and may be parts of farm machinery. The north-east part of the enclosure showed a more variable magnetic signature, and although not resolved into recognisable features, it is possible that structures existed in this area.

## THE EXCAVATION

The research aims for the project were:

1. To date the layout of the enclosure so that its temporal relationship to Winnall Down I could be established
2. To identify the presence of, and assess the preservation of, material and structural remains within the enclosure

To achieve the research aims it was decided to lay out two small trenches across the main enclosure ditch (Trenches 1 and 2) and two more within the enclosure where the geophysical survey tentatively suggested internal features (Trenches 3 and 4 in Fig. 3). The enclosure ditch encountered in Trench 2 was divided into quadrants and excavated on an alternate box system so as to provide both longitudinal and cross sections. This approach was impractical in Trench 1 and here the feature was longitudinally half sectioned. Pits, postholes, shallow scoops, and ditch fills were all fully excavated and all finds retained for post-excavation analysis. Each deposit and feature was given a unique number and a total of 105 contexts were recorded. The site was planned at 1:20 scale, and all sections drawn at 1:10.

### *The enclosure ditch*

In Trench 1, the enclosure ditch (F07) was ‘U’ shaped with a rounded base (Fig. 4). It was 1.3m wide at the top and 0.9m deep. In its initial stages, the ditch appears to have been left to silt naturally, with the accumulation of a fine, silty, reddish brown colluvium (59). A compact deposit of reddish silt, with small chalk pebbles and pea-grit inclusions (69) sealed this layer, which suggests a period of stabilisation during which a turf line may have formed. Sherds of early Middle Iron Age pottery were recovered from this deposit. Above this layer was a deep compact fill (67) containing large chalk nodules, burnt flint and debitage, animal bone, and 23 sherds of abraded early Middle Iron Age pottery. This is suggestive of rapid and deliberate back-filling with material that may have been accumulating in rubbish or midden deposits. Burnt flint, with its distinctive blue, cracked appearance, recovered mainly from the upper fills of the ditch, may have been deliberately selected for the purpose of in-filling.

In Trench 2, the enclosure ditch (F18) was also ‘U’ shaped with a rounded base, 1.2m wide at the top and 0.95m deep (Fig. 5). The primary fills of the ditch (73, 87) were a reddish brown colluvium indicating a period of silting and stabilisation after the initial setting out of the boundary. This was followed by rapid, and

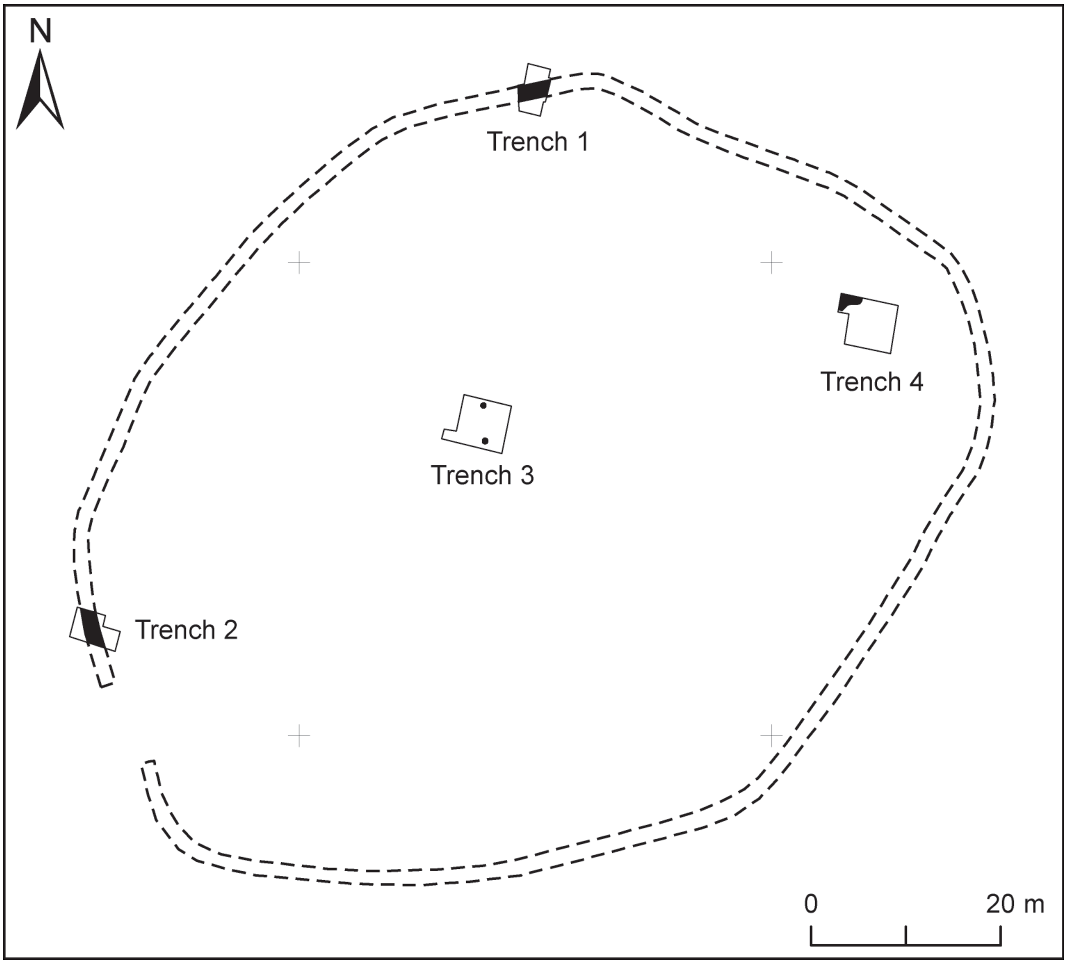


Fig 3 Plan of site showing the location of trenches and excavated features

probably deliberate, back-filling with deposits that contained a large assemblage of animal bone, burnt flint, débitage and 42 sherds of early Middle Iron Age pottery (72, 82). The ditch appeared to have been re-cut once (88). A single cattle skull was deposited, perhaps deliberately, in the primary fill (64) of the re-cut, and 67 sherds of early Middle Iron Age pottery were recovered from the seven layers of this feature.

There was no clear indication for the presence of a bank. In Trench 1, however, a slump of weathered chalk rubble (75) on the north and south facing inner lips of the ditch could be evidence for an internal bank.

*Pits*

In total, eight pits were discovered (Fig. 6). In Trench 2 three amorphous features (P1, P2 and P3) were all truncated by the ditch. F96 and F99 were roughly oval in plan, and approximately 0.5m in diameter. They had both been cut by a 'sausage-shaped' feature (F95) running north-west to south-east. This was 1.2m long, but its width was unclear as the ditch cut it.

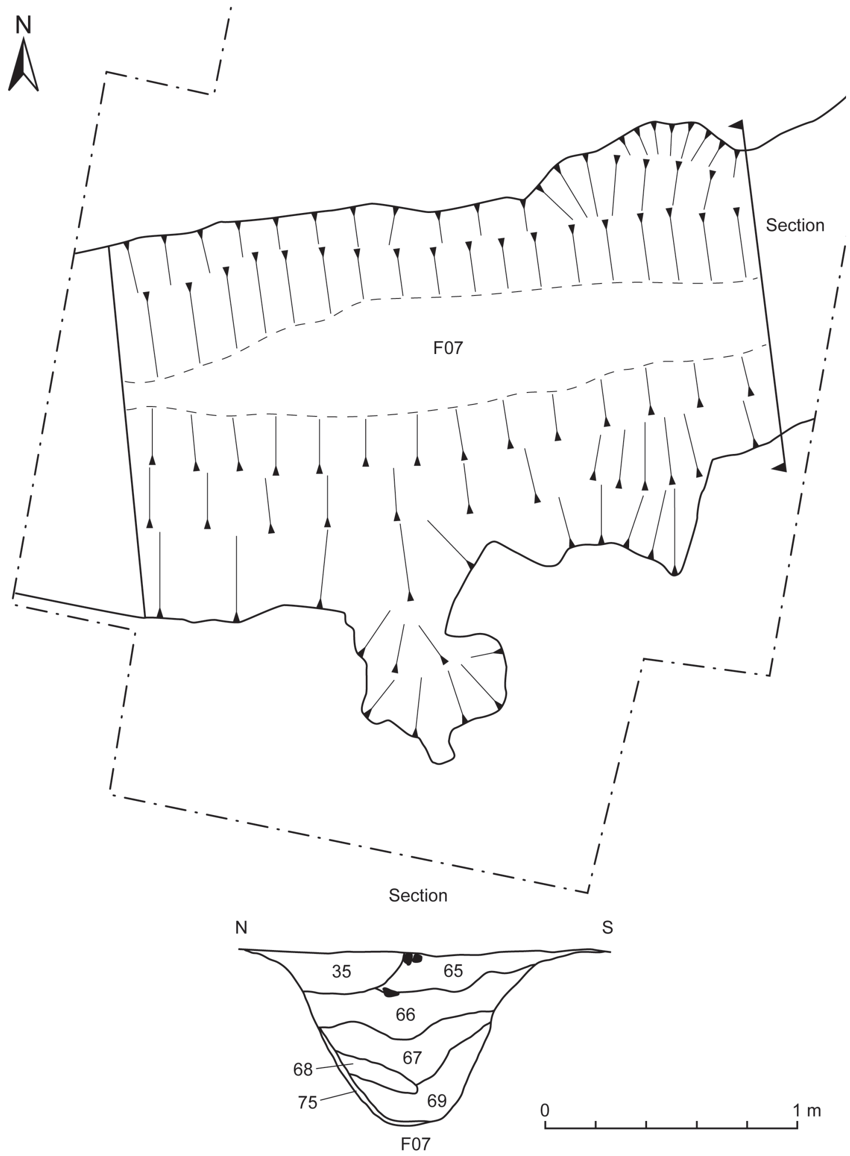


Fig 4 Plan and section of enclosure ditch, Trench 1

Without further excavation the function of these features cannot be established with any certainty, but it is possible that they are part of a structure, or structures, associated with the enclosure entrance. Three sherds of early Middle Iron Age pottery were recovered from P2 and P3.

A group of five, inter-cutting, shallow, flat-bottomed pits (P4, P5, P6, P7 and P8) were discovered in Trench 4. These were all amorphous in plan, and dug to a depth of 0.5m to 0.6m. The fills produced 41 sherds of early Middle Iron Age pottery, representing at least two haematite-coated bowls and several coarse-

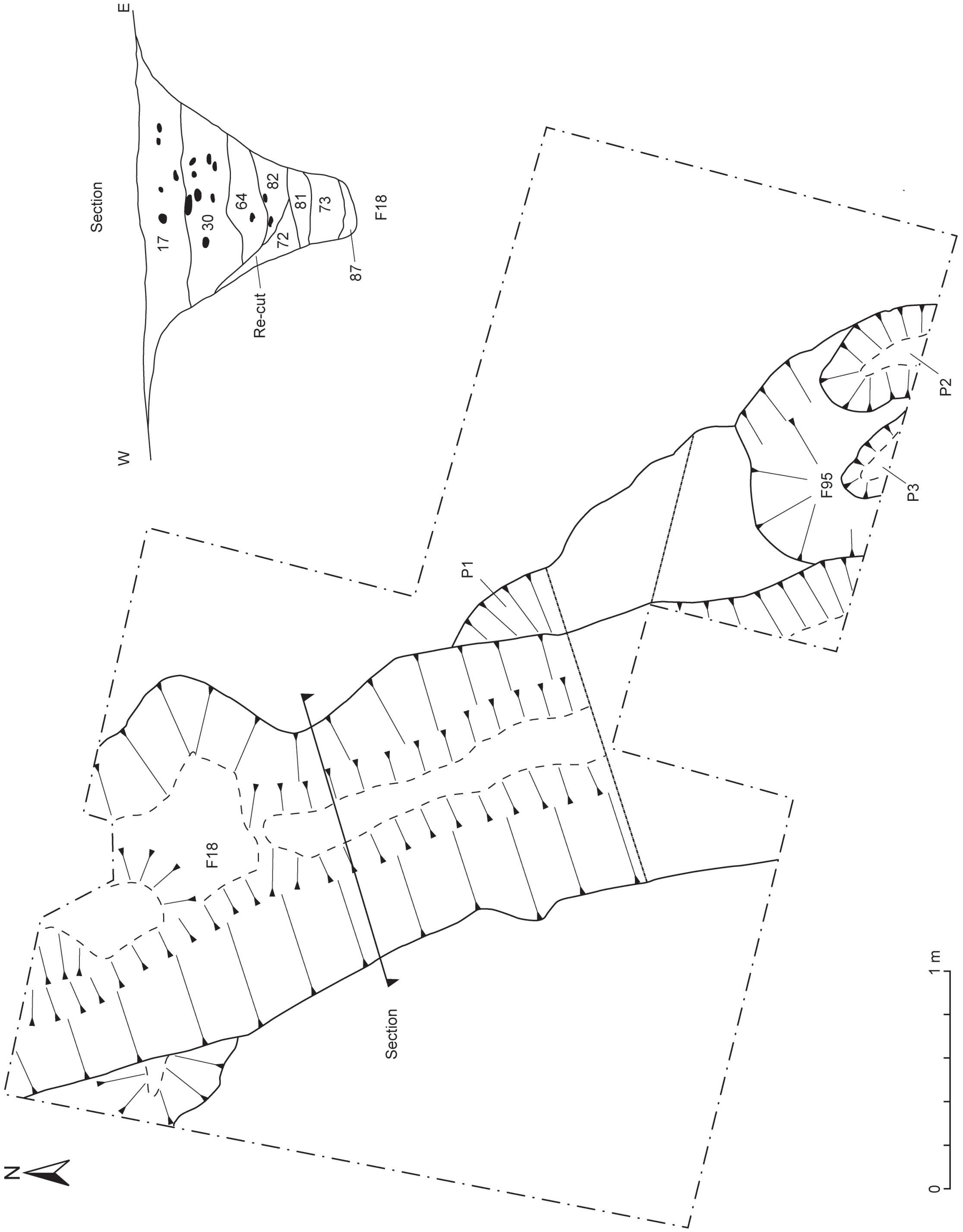


Fig 5 Plan and section of enclosure ditch, Trench 2

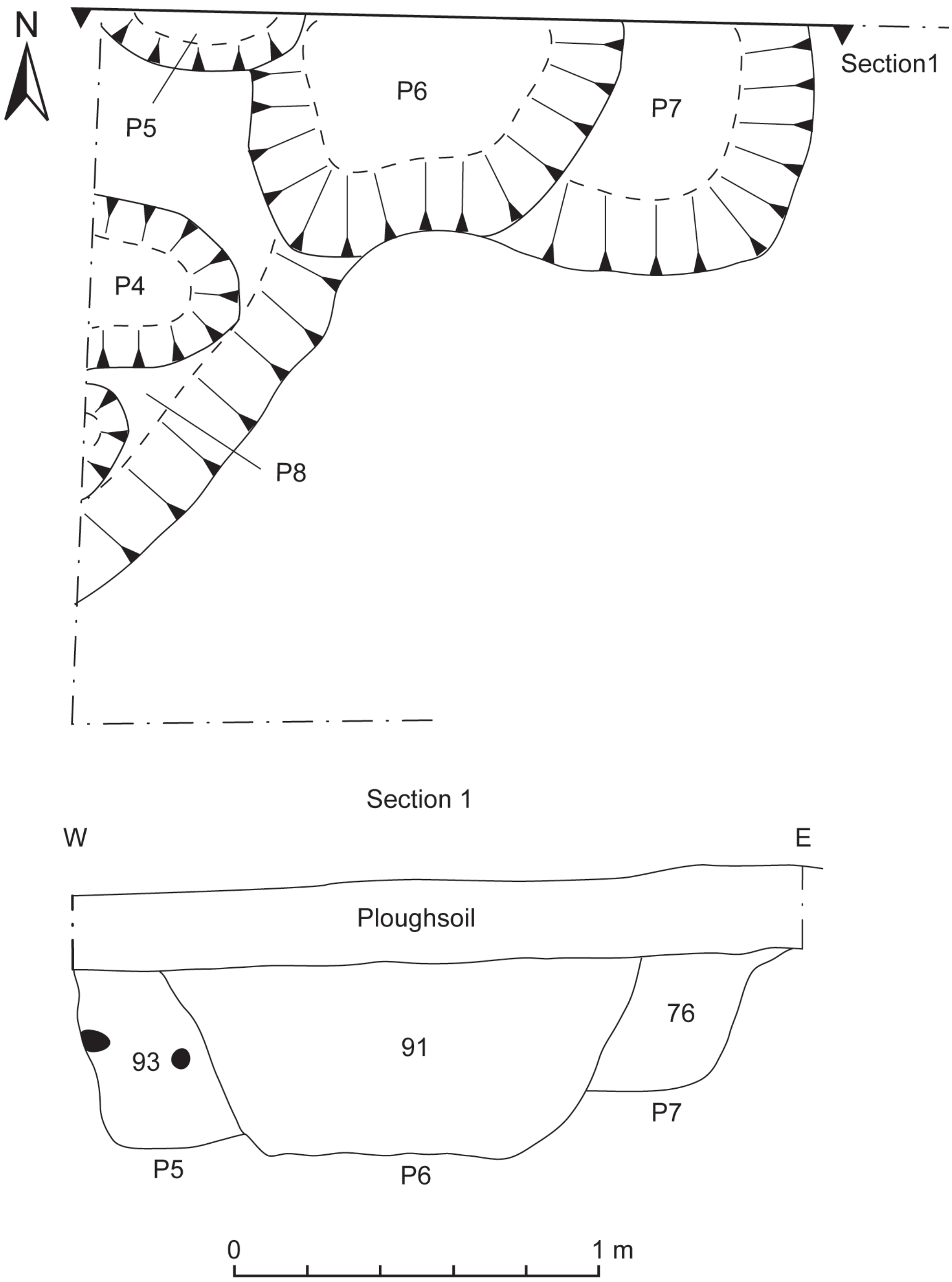


Fig 6 Plan and section of pits, Trench 4

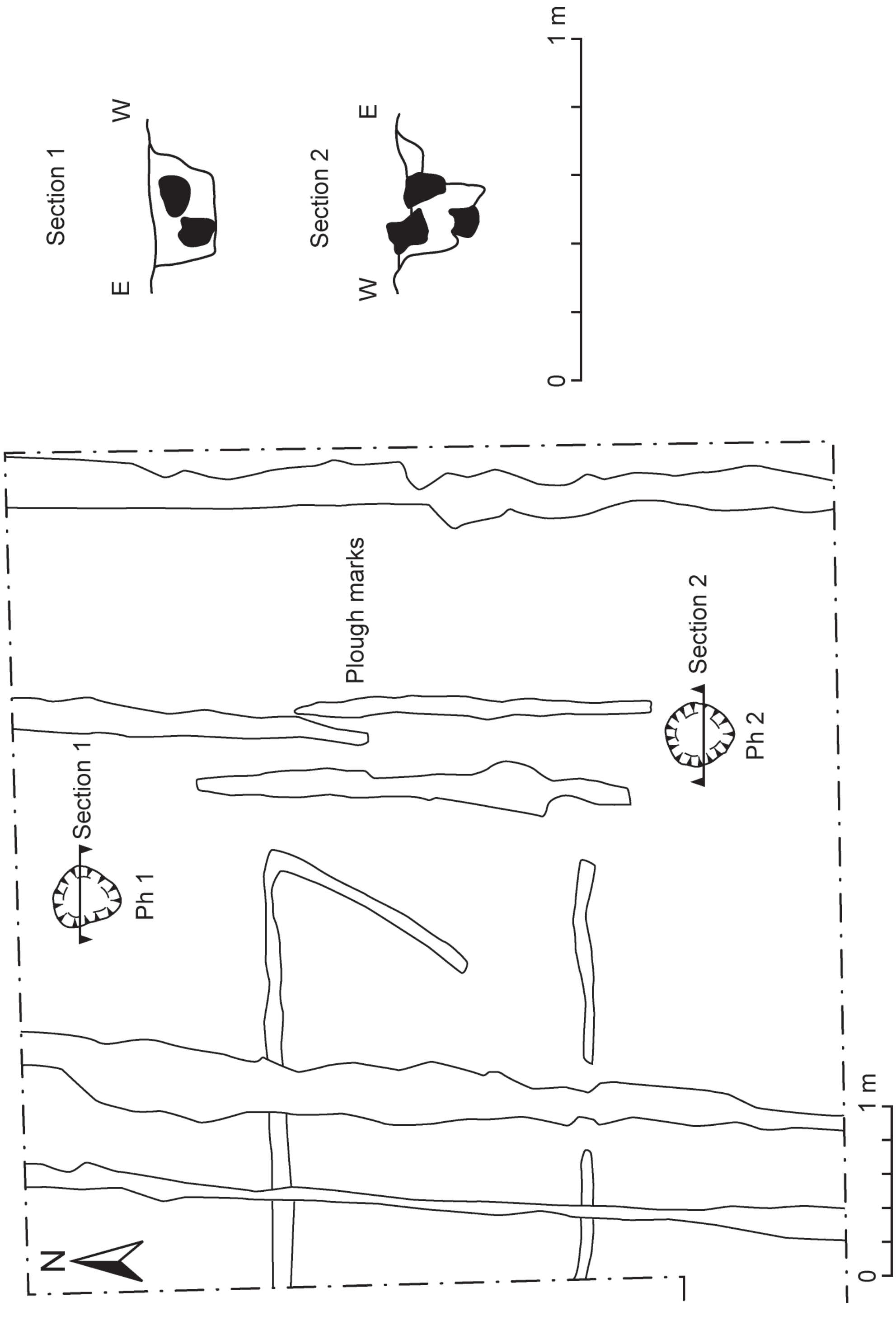


Fig 7 Plan and sections of postholes, Trench 3

ware vessels. Small quantities of disarticulated animal bone and burnt flint were recovered from the chalky primary fills (60, 62, 91, 93, and 76).

*Postholes*

Two post-holes were also identified in Trench 3 (Ph1 and Ph2 on Fig. 7). Both were 0.3m in diameter and 0.2m deep, and contained large angular flints that had probably been used as post-packing. No post-pipes were identified.

## THE FINDS

*The pottery*

A total of 162 sherds (633g) of later prehistoric pottery were recovered from excavated features, giving a mean sherd weight of 3.91g. In general, the condition of the assemblage was poor, with many sherds fragmented and less than 1g in weight. While it was possible to identify surface treatments on some sherds, this was difficult and often only traces remained. The majority, however, were suitably distinctive to allow the establishment of a chronological sequence and typology of vessel fabric and form.

The pottery was analysed and recorded using the Prehistoric Ceramics Research Group's recommended methodology (PCRG 1997). This involves the identification of fabric types based on dominant inclusions and recording of form type, surface treatment, decoration, evidence of firing, and evidence of use (e.g. abrasion). All of this information is recorded in detail in the archive. Ceramic phasing was achieved by comparison of vessel forms with other sites throughout Hampshire. Petrological analysis of four of the fabrics was also undertaken.

*Fabrics*

Fabric groups were identified using a binocular microscope (x 10) and grouped on the basis of the dominant inclusion. Two broad fabric groups were defined: flint-tempered (Group F) and a large range of sandy fabrics with quartz and/or glauconite inclusions (Group Q). All of the flint, with the exception of the flint detritus, appears to be burnt.

Group Q: quartz sand fabrics

Q1 Sparse (7 %), subrounded quartz grains, ≤0.5 mm, with rare (1–2 %), sub-rounded, subangular to angular flint, ≤2 mm, and very rare (<1 %), sub-angular flint detritus (≤5 mm), and very rare (<1 %) iron oxides, ≤2 mm), naturally-occurring in the clay matrix.

Q2 Sparse (5 %) subrounded quartz grains, ≤0.5 mm, with sparse (5–7 %) subrounded-subangular flint, ≤3 mm, and very rare (<1 %) iron oxides, ≤1 mm, naturally-occurring in the clay matrix.

Q3 Sandy quartz fabric with rare to sparse (1–3 %) sub-angular flint inclusions (≤0.5 mm) and very occasional sub-angular flints (≤5 mm), common (20–30 %) well sorted sub-rounded quartz grains (≤0.5 mm), and very rare (<1 %) iron oxides (≤0.5 mm).

Q4 Very fine to silt-sized, very well-sorted, quartz grains (≤0.2 mm) and very rare (≤1 %), subrounded flint, ≤3 mm, naturally-occurring in this very fine clay matrix, with a layered texture only visible under high power microscopic investigation.

Q5 Sandy quartz fabric with very rare (<1 %) sub-rounded flint inclusions (≤0.5 mm), and common (20–30 %) well sorted sub-rounded quartz grains (≤0.5 mm).

Q6 Coarse-grained sandy fabric with rare (1–3 %) sub-rounded flint inclusions (≤3 mm), common (20–30 %) moderately sorted sub-rounded quartz grains (≤1 mm), very rare (<1 %) sub-rounded quartz grains (≤2 mm), and very rare (<1 %) iron oxides (≤0.5 mm).

Q7 Very common to abundant (30–40 %), well-sorted, subrounded to rounded glauconite and quartz grains, ≤0.8 mm naturally-occurring in the clay matrix.

Q8 Sandy quartz fabric with very common to abundant (30–40 %) well sorted sub-rounded quartz grains (≤1 mm), and clear of other obvious inclusions.

Group F: flint-tempered fabrics

F1 Moderate (10–15 %), poorly sorted, subangular to angular flint temper, ≤5 mm, in a clay matrix containing naturally-occurring rare (1–2 %), rounded quartz grains, ≤0.5 mm, and very rare (<1 %) iron oxides, ≤1 mm.

F2 Moderate (10 %), well-sorted, subangular to angular flint temper, ≤1 mm, in a clay matrix containing naturally-occurring and sparse (3–5 %), subrounded to rounded quartz grains, ≤0.2 mm.

F3 Moderate (10–15 %), moderately-sorted, subangular to angular flint temper ≤4 mm, in a clay matrix containing naturally-occurring sparse to moderate (7–10 %), subrounded quartz grains ≤0.5 mm.

*Petrographic analysis of pottery fabrics*

Thin sections were prepared of typical examples of fabrics F1, Q2, Q3 and Q7 (Fig. 8, 1–4). These were examined using a LEICA DM

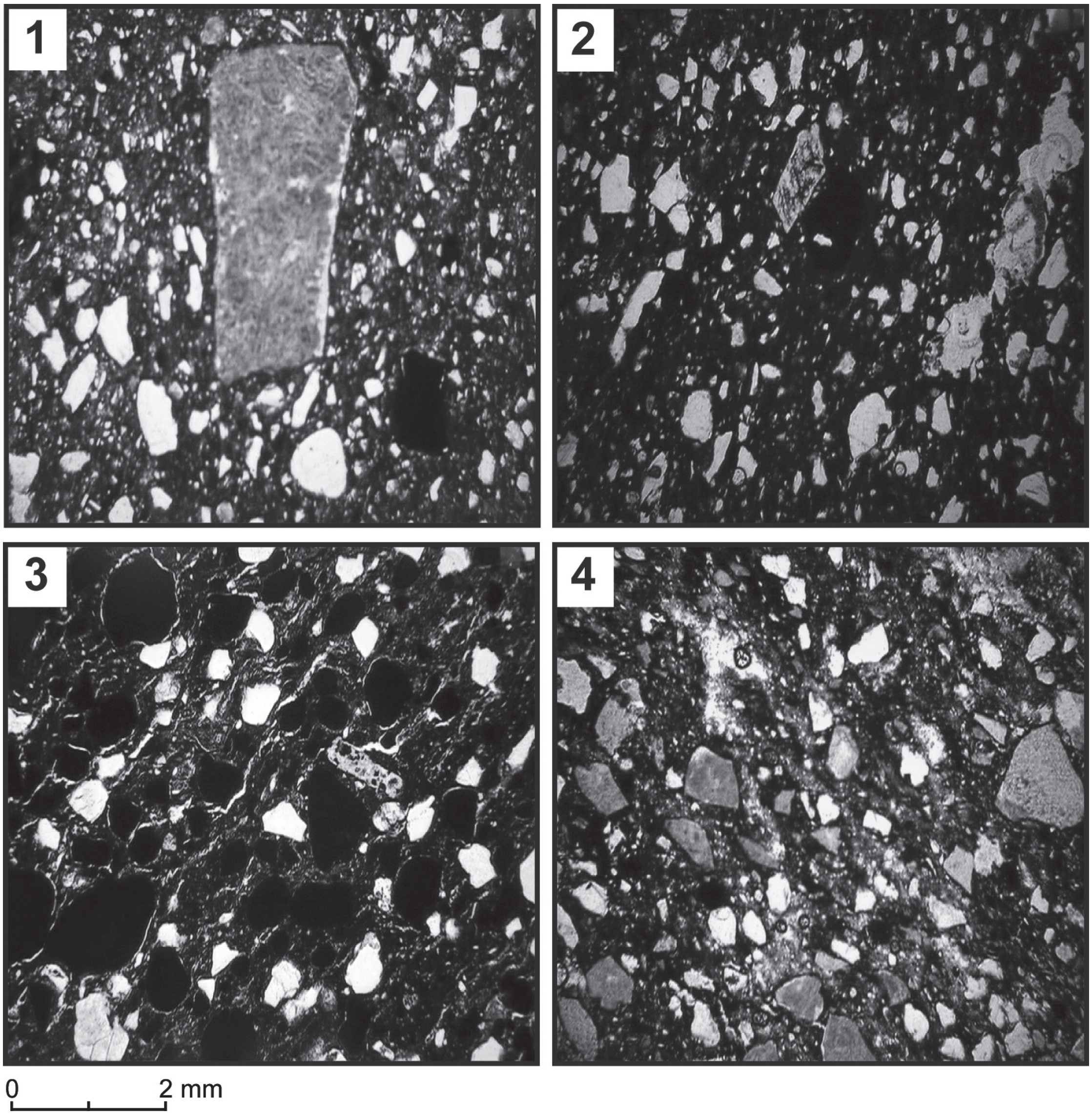


Fig 8 Petrographic analysis of ceramic fabrics

EP polarising microscope at a magnification of x 40 and x 400.

Quartz sand fabrics

Q2 A red brown birefringent matrix. Contains moderate sub-rounded poorly sorted grains of quartz up to 0.35 mm in maximum diameter, sparse angular poorly sorted grains of flint up to 1.5 mm in maximum diameter, and very sparse sub-rounded moderately sorted iron oxides up to 0.4 mm in maximum diameter (Fig. 8, 1).

Q3 A red brown birefringent matrix. Contains common sub-rounded moderately sorted grains of quartz up to 0.3 mm in maximum diameter, sparse subangular poorly sorted grains of flint up to 0.4 mm in maximum diameter, and very sparse subangular poorly sorted iron oxides up to 0.4 mm in maximum diameter (Fig. 8, 2).

Q7 A red brown birefringent matrix. Contains abundant rounded well sorted grains of glauconite up to 0.5 mm in maximum diameter, sparse subangular poorly sorted grains of flint up to 2 mm in maximum diameter, sparse subrounded well sorted grains of quartz up to 0.5 mm in maximum diameter, and very sparse subrounded well sorted grains of iron oxide up to 0.2 mm in maximum diameter (Fig. 8, 3).

Flint-tempered fabrics

F1 A brown birefringent matrix. Contains common angular poorly sorted grains of flint up to 1 mm in maximum diameter, and common subangular poorly sorted grains of quartz up to 0.3 mm in maximum diameter (Fig. 8, 4).

Quartz sand fabrics dominate the assemblage at Winnall Down II (Fig. 9 and Table 1). Sandy fabrics are common in Early Iron Age contexts throughout Hampshire and predominate in the earliest phases at Danebury (Cunliffe 1984, 236–7) and Lains Farm (Morris 1991, 24). However, this pattern is not repeated at Winnall Down I where coarse flint-tempered fabrics are most common (Hawkes 1985, 60–61).

Through an examination of recent ethnographic studies of pottery production (e.g. Arnold 1981; Rye 1981), Morris (1991) has argued that potters are most likely to utilise suitable potting clays located within 1 to10km

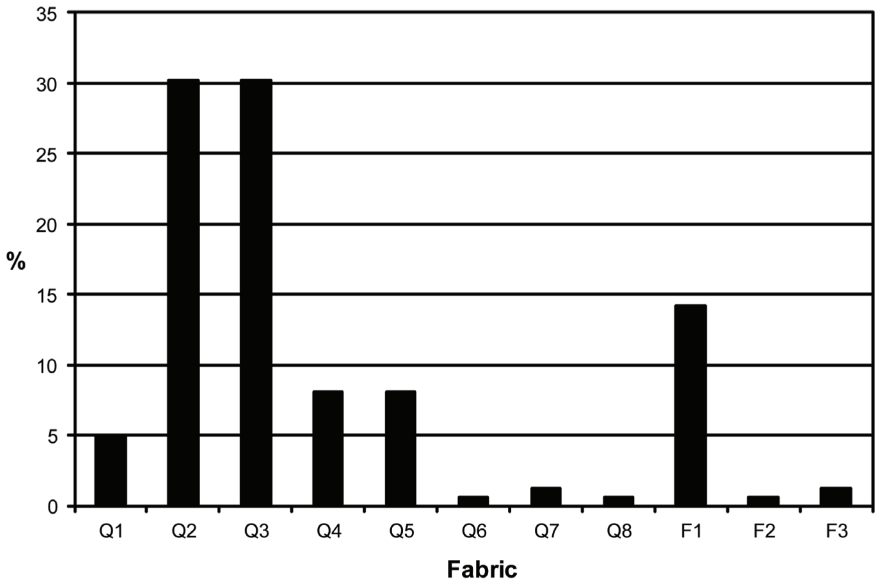


Fig 9 Representation of sherds by fabric

*Table 1* Number and weight of sherds by fabric

| Fabric Type | Count | % by count | Weight | % by weight |
|---|---|---|---|---|
| Q1 | 8 | 4.9 | 48 | 7.6 |
| Q2 | 49 | 30.2 | 134 | 21.2 |
| Q3 | 49 | 30.2 | 172 | 27.2 |
| Q4 | 13 | 8 | 44 | 7 |
| Q5 | 13 | 8 | 64 | 10.1 |
| Q6 | 1 | 0.6 | 1 | 0.2 |
| Q7 | 2 | 1.2 | 16 | 2.5 |
| Q8 | 1 | 0.6 | 3 | 0.5 |
| F1 | 23 | 14.2 | 130 | 20.5 |
| F2 | 1 | 0.6 | 10 | 1.6 |
| F3 | 2 | 1.2 | 11 | 1.7 |
| **TOTAL** | **162** | **100%** | **633** | **100%** |

of their home-base. The area within 10 km of Winnall Down II is dominated by Upper Chalk, although deposits of Clay-with-Flints, which may have provided clay suitable for pottery production, are present within 1 to 2 km to the south and east. All of the flint-tempered (Group F) and seven of the quartz sand fabrics (Q1, Q2, Q3, Q4, Q5, Q6, and Q8) could have been produced from these deposits. The mineral glauconite, however, recognised as a component of Q7, does not occur naturally on the chalk downlands, so its presence indicates a non-local source of supply and could represent trade or exchange. Glauconite has frequently been documented as a component of Early Iron Age sandy fabrics throughout Hampshire (e.g. Qualmann *et al.* 2004; Morris 1991; Cunliffe 1984; Hawkes 1985). Hawkes (1985, 60) has argued that the glauconitic sands identified at Winnall Down I could have been obtained locally from sources of Reading Beds located only 7km to the south, although more likely sources are the Upper Greensand deposits, in which glauconite is a common mineral. Such deposits surround the chalk downlands, located either 45km to the west, at Compton Chamberlayne, or 50km to the north-west, in eastern Wiltshire (Morris 1991, 19).

*Forms and other attributes*

Six rims, two base types, and two types of decoration have been defined in the assemblage (Fig. 10). They come from a variety of round-bodied bowls and necked or shouldered jars. The finer quartz sand fabrics Q2, Q3, Q4, and Q5 are most commonly associated with the round-bodied bowls, while necked jars are typical forms associated with the coarser flint-tempered fabrics F1, F2, and F3 (Table 2).

The assemblage is consistent with those found on other Iron Age sites in Hampshire. The bowls and jars are comparable to those identified at Winnall Down I (e.g. Fasham 1985, fig. 52, 28–32; fig. 53, 47–49) and Easton Lane (Fasham *et al.* 1989, fig. 91, 3–6). Similar forms were recognised at St. Catharine's Hill (Hawkes *et al.* 1930, fig. 12) and Wallington Military Road (Hughes 1974, figs 15, 17; fig. 16, 18–30). Round-bodied bowls analogous to Winnall Down II have also been identified further away in western Hampshire at Lains Farm (Bellamy 1991, fig 8, 4–6) and Danebury (Cunliffe 1984, figs 6.55–6.56).

Three sherds show evidence of decoration. On two of them (Fig. 10, 9) a series of shallow-tooled parallel lines extend just above the shoulder. The third (Fig. 10, 8) has shallow-tooled single parallel lines in groups of five, restricted to the upper part of the vessel just below the shoulder. The position of the decoration and the round-bodied form of the vessel is similar to examples from Winnall Down I (e.g. Fasham 1985, fig. 52, 28) and Lains Farm (Bellamy 1991, fig. 8, 6).

Rims

R1 Upright, rounded rim on slightly necked, slack to barrel profile jar (Fig. 10, 1).
R2 Slightly flared to upright, softly-pointed, very short rim on probable necked vessel (?bowl) (Fig. 10, 2–4).

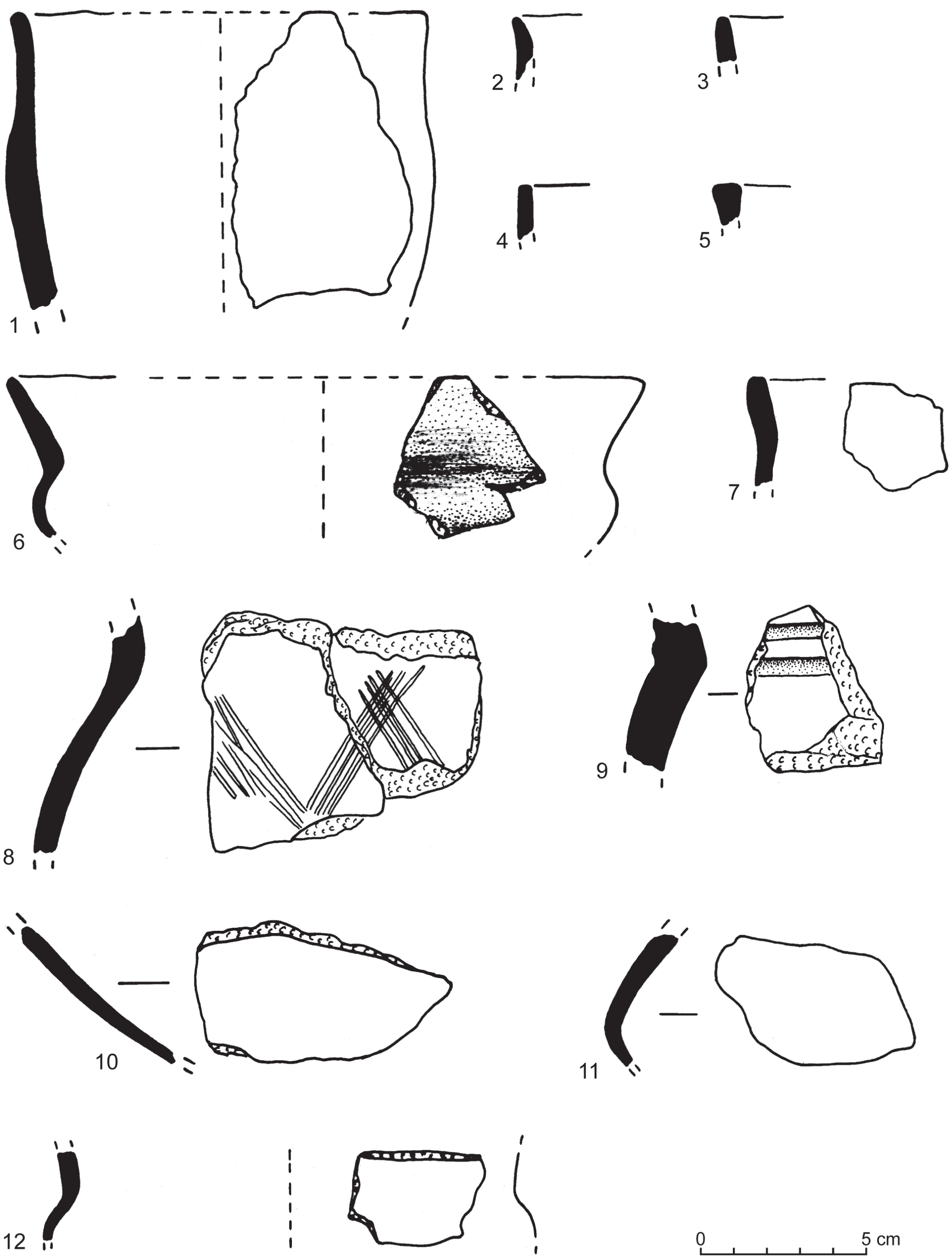


Fig 10 Pottery forms

*Table 2* Correlation of ceramic fabrics and forms

| | R1 | R2 | R3 | R4 | R5 | R99 | B1 | B2 | B99 | A3 | Plain body | TO1 | TO2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Q1** | | | | | 1 | | | | | | 7 | | |
| **Q2** | | 1 | | | | 1 | | | | 1 | 16 | | 2 |
| **Q3** | 1 | | 1 | | | | 1 | 1 | | | 5 | | |
| **Q4** | | 2 | | 1 | | | | | | 1 | 7 | | |
| **Q5** | | | | | | | | | | | 4 | 1 | |
| **Q6** | | | | | | | | | | | 1 | | |
| **Q7** | | | | | | | | | | | 2 | | |
| **Q8** | | | | | | | | | | | 1 | | |
| **F1** | | | | | | | | | 1 | | 16 | | |
| **F2** | | | | | 1 | | | | | | | | |
| **F3** | | | | | | | | | | | 2 | | |

R3 Flat-topped rim on necked jar (Fig. 10, 5).
R4 Rounded, medium-length, flared rim on necked bowl (Fig. 10, 6).
R5 Upright, rounded rim on short-necked vessel of unknown type (Fig. 10, 7).
R99 Indeterminate rim form.

Bases

B1 Simple, flat base.
B99 Central part of base.

Decorations

T01 Shallow, narrow-tooled, single lines in parallel groups of five strokes creating 'W's (Fig. 10, 8).
T02 Two horizontal, parallel, broadly-tooled lines (Fig. 10, 9).

*Surface treatments*
Three types of surface treatment were recognised within the assemblage: smoothed, slipped, and burnished. Burnishing is a frequent occurrence (35 % of the assemblage) and is especially apparent on quartz sand vessels (Fig. 10, 10). The presence of a red surface finish was identified on 7.2 % of the assemblage (Fig. 10, 11–12). A red-finish is traditionally attributed to a haematite-coating. Middleton (1987), however, has observed elsewhere in Wessex that the same effect can be obtained by using a slip. Indeed, X-ray diffraction analysis of four red-finished sherds from Lains Farm demonstrated conclusively that the finish of these examples was produced by a slip rather than by the application of haematite (Morris 1991, 22). It is possible that the red-finished wares at Winnall Down II may have been produced by the application of a slip containing fine particles of iron oxide rather than haematite. A red-finish was only identified on fine quartz sand fabrics Q4 and Q5.

*Spatial variation*
Although the ceramic assemblage is not large, it is possible to suggest some general depositional patterns.

Enclosure ditch
The ditch was examined in two locations, one on the north (Trench 1) and one on the south-west side (Trench 2) of the enclosure. One hundred and twenty-one g of pottery were recovered from Trench 1, giving an average of 79.6 g per m$^3$ of soil excavated. Three hundred and fifty g of pottery were recovered from Trench 2 , giving an average of 153.5 g of pottery per m$^3$. There was, therefore, a significantly higher density in Trench 2 in the south-west of the enclosure near to the entrance. The highest densities of red-finished (possibly haematite-coated) sherds were also distributed in Trench

2 where, in some contexts, as much as 37 % of the sherds were of this type.

Pits and scoops

One hundred and sixty-two g of pottery were recovered from the fills of the shallow scoops and pits identified in Trench 4. This gives an average of 150 g per $m^3$ of soil. Almost 50 % of the assemblage (80 g) however, was recovered from F63, while the highest densities of red-finished sherds (14.3 %) were recovered from F77.

*Ceramic style and dating*

The pottery described above is consistent with the style of pottery described by Cunliffe (1978) as 'All Cannings Cross-Meon Hill' for which a date between the 5th and 3rd centuries BC would be acceptable. This is comparable to cp 4–5 at Danebury (Cunliffe 1984) and Phase 3 at Winnall Down I (Fasham 1985). The complete range of material includes round-bodied, decorated, red-finished, and burnished bowls and a variety of plain shouldered, burnished and barrel-profiled jars. The fabrics belong to a variety of wares similar to others already known for this period (Qualmann *et al.* 2004; Morris 1991; Cunliffe 1984; Hawkes 1985).

*Discussion*

The pottery assemblage is similar to the much larger assemblage broadly classified as Phase 3 (Early Iron Age) at Winnall Down I (Hawkes 1985, 67). This suggests that activity at Winnall Down II is likely to be broadly contemporary with the enclosed phase of occupation at Winnall Down I (equivalent to cp 1–5 at Danebury (Cunliffe 1984)). The absence of furrowed-bowls, scratch-cordoned vessels, and later saucepan pot forms characteristic of the St Catharine's Hill-Worthy Down style (Cunliffe 1978) however, suggests only a single ceramic phase for Winnall Down II, comparable to cp 4–5 at Danebury (Cunliffe 1984). This would represent a 4th century BC emphasis for Winnall Down II.

Furrowed and scratch-cordoned bowls were well represented in the Early Iron Age enclosure at Winnall Down I (Hawkes 1985). If it is accepted that such forms are associated with the early part of the Early Iron Age (Cunliffe 1978), then this suggests that the enclosure at Winnall Down I was already established when the enclosure ditch at Winnall Down II was dug. Undecorated saucepan pottery is only poorly represented at Winnall Down I (Hawkes 1985) and its absence from the Winnall Down II assemblage suggests a cessation of activity at both sites by the Middle Iron Age (equivalent to cp 6 at Danebury; Cunliffe 1984).

Ceramic evidence for the Early Iron Age at Easton Lane is very limited. Scratch-cordoned bowls that were well represented at Winnall Down I were absent, but round-bodied bowls (Fasham *et al.* 1989, fig. 91, 3–4) similar to those identified at Winnall Down II were recovered. A single sherd of a slack-shouldered jar (Fasham *et al.* 1989, fig. 91, 6) is comparable in fabric and form to examples from Winnall Down II (fig. 9, 1). Fasham (1989, 94) has argued that all of the Early Iron Age pottery recovered from Easton Lane was residual, presumably derived from within the Phase 3 settlement enclosure at Winnall Down I. However, the Winnall Down I, Winnall Down II and Easton Lane assemblages should be seen as complementary with a significant overlap especially during the later Early Iron Age.

The petrological analysis suggests that the majority of the assemblage was produced within 10 km of the site. The identification of glauconite as a component of fabric Q7 however, implies that *some* pottery (perhaps only a single vessel) originated from an inter-regional source perhaps up to 50 km from Winnall Down II.

It is likely to be significant that 7.3 % of the pottery recovered from Winnall Down II is red-finished (possibly haematite-coated), and it accounts for more than 37 % of the assemblage from some contexts. Haematite-coated pottery makes up less than 3 % of the Phase 3 assemblage at Winnall Down I (Hawkes 1985) while at Old Down Farm (Davies 1981) it accounts for less than 5 % of the Early Iron Age assemblage. Cunliffe (1978) has suggested that haematite-coating is more common in the later parts of the Early Iron Age, although its availability is probably not simply limited by chronology. If a 4th century BC emphasis for Winnall Down II is accepted, then an increase in the proportion of red-finished wares to other fabrics should be expected. Hawkes (1985, 68) ,however,

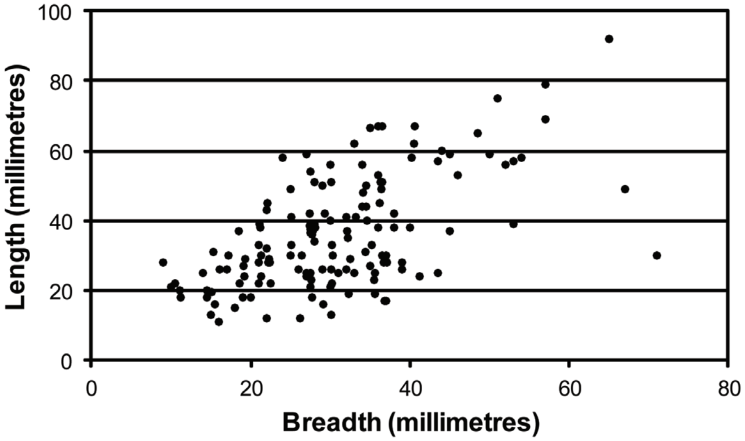


Fig 11 Length:breadth ratio of flints

has argued that the use of haematite may be linked to status, or that its distribution represents a marketing pattern in which Winnall Down I and Old Down Farm are peripheral. An increase in the quantity of red-finished wares could therefore indicate the enhanced status of some enclosures. If this is still an acceptable link between a higher proportion of finely-finished pottery in an assemblage to raised site status and if a chronological effect cannot be inferred, then it is possible to suggest that Winnall Down II is of higher status than Winnall Down I. In either case, the high densities of red-finished pottery at Winnall Down II suggests a deliberate selection of this pottery for deposition in particular localities.

*The lithics* by Amelia Pannett

The assemblage collected during the excavation comprised 191 pieces of worked flint, 170 pieces of burnt flint and a large quantity of naturally fractured chunks, flakes and nodules which were discarded during analysis. The inclusion of these natural pieces in the ditch fill may have been a deliberate act, so their presence is recorded, but they are of no analytical value in respect of the assemblage as a whole.

The worked lithics were generally large, on average 35.1 mm in length and 30.5 mm wide, reflecting the size of the available flint resource in this part of Wessex. All corticated pieces showed the chalky cortex typical of this area. The flint used in the production of the assemblage varied considerably in quality with both dark-grey or black, fine, flawless flint and lighter, coarser flint containing flaws, including fossils and crystals, represented.

The quantity of burnt flint recovered and the diversity of the source material is interesting, and will be discussed below. The burnt flint is treated separately from the unburnt material as it was not analysed in the same way. Instead, it was noted whether the pieces had been knapped prior to being burnt, with any specific points of interest recorded.

*The worked assemblage*

The majority of the worked assemblage was patinated (73.5 %), although there was considerable variation present. In some instances surfaces were completely white, with recent fractures showing up to 1 mm in depth of patina. In others, surfaces were lightly speckled. There was no apparent correlation between context and the level of patination observed. The formation of patina on lithics is dependent on a number of factors, including the mineral content and pH of the soil and the structure of the flint, and is not a reliable indicator of antiquity.

Most of the lithics (73 %) were corticated, with cortex covering ranging from small patches on a dorsal surface to entire dorsal surfaces and platforms. Such a high percentage demonstrates the use of flaked nodules rather than prepared cores in the production of much of the assemblage.

The assemblage was dominated by flakes (92.5 %), with only eight blades or blade fragments (4 %) and four cores (2 %). The flakes were generally irregular, many were squat, and most were heavy, with an average breadth of 9.5 mm. Following Humphrey (2007), the length: breadth ratio was analysed for all complete flakes (Fig. 11) to determine what proportion were at or around 1:1. Humphrey suggests that the production of short, squat flakes was integral to Iron Age lithic technologies, and provides a reliable indicator of later prehistoric lithic exploitation. As Fig 11 shows, there is a clear clustering of measurements around the 1:1 line at the lower end of the scale. According to Humphrey's model, these short, squat flakes represent the Iron Age working of lithics at Winnall Down.

Poor knapping techniques were evident in the quantity of hinge or stepped terminations on complete pieces (c. 40 %) and dorsal scar patterns on many flakes showed hinge fracture scars. Surviving platforms were predominantly planar (65 %), and generally thick, with many showing pronounced bulbs and bulbar scars indicative of the use of hard hammer technique. Identifiable dorsal scar patterns showed sequences of irregular removals, with cores struck where a suitable angle could be achieved, rather than from a prepared edge.

Three of the four cores identified were roughly-flaked nodules from which irregular flakes had been randomly removed. Two had also been used for the removal of blades, but these were fortuitous removals and not achieved by design through core or platform preparation. One of these heavy, expedient cores had subsequently been used as a hammerstone or pounding implement, and had a discrete area of abrasion at one end. The fourth core was burnt and appears to represent the remains of a discoidal core. Discoidal cores are characteristic of the later Neolithic and Early Bronze Age, and as such this piece is like to be residual (see below).

Retouch was noted on 20 pieces, with a further three displaying edge damage, probably as a result of use. Five of the retouched pieces were scrapers, three of which were rough scrapers formed on irregular flakes through abrupt retouch. Two thumbnail scrapers were also identified, one of which was slightly squared in shape with retouch around the distal end and both lateral edges. The second had been retouched along the distal end, but only half survived, having split down the centre. Three piercers were identified, although all were crude and abraded. Each had been formed using abrupt retouch to create a point at the distal end, and all were rounded through use. The remaining worked pieces were irregular flakes with one or more edges retouched. This took the form of both abrupt and pressure flaking retouch to create a notched, straightened or denticulated edge. Several of the retouched pieces also showed signs of edge damage through use, either on the retouched or unmodified edges. Reuse of earlier flakes was identified in three cases, with retouch flaking through the patina exposing the fresh flint below.

The pieces showing signs of edge damage comprised one regular and two irregular flakes. One irregular flake had one heavily edge-damaged lateral edge with a corticated edge opposite that provided a comfortable grip – this is likely to have been used as a cutting implement.

*Burnt material*

Of the 170 pieces of burnt flint, 35 were flakes or had been knapped prior to being burnt. In all cases the burning was severe, with the flint showing crazed and fractured surfaces characteristic of material that has been exposed to high temperatures or prolonged heat. Many of the pieces had shattered, exposing the pitted and fractured interior of the flint. The burnt flint was predominantly grey or white, although there were five pieces that had reddened due to the exposure to heat.

Cortex remained on a high proportion of the burnt chunks, enabling identification of these as the rounded, knobbly nodules typical of the raw material available on the surface of any field in the Wessex region. The majority seem then to have been collected as nodules specifically for burning.

The pieces that had been worked prior to burning comprised flake fragments and fragments of cores (of unidentifiable form) or flaked nodules. As all were heavily burnt and fragmented proper analysis of the techniques involved in their manufacture was not possible. As a result, it was not certain whether these pieces were predominantly residual, deriving from earlier activities on the site, or manufactured in the Iron Age and subsequently burnt. The burnt discoidal core fragment, however, would seem to indicate that at least some of the burnt pieces derived from an earlier period of prehistory.

*Discussion*

The generally poor quality of the knapping techniques employed in the creation of much of the analysed assemblage points to a later prehistoric date for the material. It is generally accepted that lithic manufacturing techniques declined from the middle Bronze Age onwards (Edmonds 1995; Pitts 1978). This decline is blamed primarily on the increasing availability of metal tools (Butler 2005). Lithic production continued into the later Bronze Age, although the range of tools diminished as the necessary skills were forgotten. Lithic technology in the later prehistoric period is generally regarded as reactionary or expedient, producing simple tools specifically for a particular task, and discarding them afterwards (Butler 2005).

There is debate about whether the manufacture of flint tools continued into the Iron Age. In 1981, Saville wrote that 'production and use of flint artefacts…declined and ceased altogether within the later Bronze Age' (Saville 1981, 6), an opinion that has perpetuated for the last two decades. However, flint continues to be recovered from Iron Age sites, and this material cannot all be explained away as residual. Indeed, Humphrey's recent work has sought to demonstrate that Iron Age material is distinctive, can be identified, and that its analysis is worthwhile (Humphrey 2007).

Following Humphrey's criteria for the recognition of Iron Age flint, it is possible to suggest that much of the material recovered from Winnall Down II is contemporary with the construction and occupation/use of the enclosure. The squat pieces achieving close to a 1:1 length:breadth ratio in particular, and those flakes displaying crude or unskilled knapping techniques. Patinated pieces which have been retouched at a later date could also be attributed to Iron Age activity (Humphrey 2007). Clearly some pieces are residual, the thumbnail scrapers and the discoidal core fragment being the obvious examples. Amongst the flake assemblage, pieces tending towards the 2:1 length/breadth ratio and pieces displaying more skilled knapping techniques could also belong to an earlier period of occupation in the landscape.

The predominant aspect of the Winnall Down II lithic assemblage is the poor quality of manufacture, with large platforms and bulbar scars indicative of hard hammer techniques that appear to have involved striking a core or nodule wherever angles afforded, and hoping for a useable result. There appears to have been little selection of material for working, with flawed and poor quality material used despite the occurrence of high quality flint in the area. It is possible that people were simply picking pieces up whenever they were needed – this is perhaps further highlighted by the high proportion of corticated flakes in the assemblage.

The tools that were manufactured were crude, with abrupt retouch used to form simple cutting edges, piercers and scrapers (although it is possible that a number of these are also residual). Perhaps the most likely examples of Iron Age tools are two heavy flakes with acute edge damage. One of them has a thick corticated edge opposite the damaged edge, which fits comfortably into the hand. The other is also corticated opposite an abruptly retouched edge which also showed signs of damage through use. Both of these pieces appear to have been used for cutting. While neither piece reflects skill in knapping, they were evidently highly useable tools. Humphrey cautions against describing such pieces as 'simple', commenting that 'function appears….to outweigh aesthetics for Iron Age flint tools' (2007, 152).

That at least part of the assemblage recovered from Winnall Down II was contemporary with the use of the site can be confidently suggested if Humphrey's model is accepted. That flint was in itself significant to the people who used this site is perhaps illustrated by the deposition of large quantities of both worked and burnt flint in the upper fills of the ditch. The burning of flint nodules may have been integral to cooking or corn drying processes (Cunliffe 1978), but the burning of material that had been worked could have had a more symbolic purpose. I have argued elsewhere that the burning of flint should not simply be regarded as a means of disposing of 'rubbish' or waste, but that it could have been part of a more complex system of transforming material or removing it from circulation (Pannett *forthcoming*). In this sense the burning of struck lithics, particularly those from an earlier period of occupation, and their subsequent deposition in the final fills of the ditch could have been a means of symbolically closing the site, sealing the ditches with material that has already been 'removed' from the social sphere.

*The animal bones* by Richard Madgwick

A small assemblage of 143 bone fragments was recovered. Data collection was undertaken following the Cardiff Osteoarchaeology Research Group's (CORG) recording strategy, with an additional focus on taphonomic modification. The completeness of elements was recorded using zones following the guidance of Serjeantson (1996) and specimens were only recorded if more than 50 % of a single zone was present. Zones were used in the calculation of the minimum number of elements (MNE) and minimum number of individuals (MNI), with the most common sided zone of an element providing the MNI. All elements were recorded apart from maxillary teeth (except for pig canines), cranial fragments (except for zygomatics and occipitals), sternal fragments, carpals and tarsals (except for astragalus, calcaneus and navicular-cuboid). Vertebrae other than the diagnostic atlas and axis were recorded as medium or large sized taxon and were only recorded if 50 % of the centrum was present.

As a supplement to the CORG recording strategy, a taphonomic analysis was undertaken in order to elucidate the pre-depositional history of each recordable specimen. This was undertaken using a 10 x or 20 x magnification hand lens as required, under the light of a 60 watt lamp. Although taphonomic overprinting undoubtedly caused some modifications to be overlooked (Shipman 1989), every effort was made to study the entire surface of each fragment systematically. Weathering was recorded following the guidance of Behrensmeyer (1978). In addition the presence of gnawing, trampling (following Andrews & Cook 1985), abrasion (following descriptions by Behrensmeyer 1982, 1988) and mould staining (following Nicholson 1996 & Littleton 2000) was noted. Efforts were also made to record the nature of fracture patterns in detail, not only through the use of Serjeantson's (1996) eight zone recording system, but also through Outram's (2001) fracture freshness index for the identification of fresh and dry breaks. This approach does not provide a definitive answer for the way in which a single specimen became fragmented, but is useful as a guide to fracture patterns. The analysis can only be employed for long bone fragments of more than 40 mm in length and was applied to both identifiable specimens and unidentified medium and large sized long bone splinters.

The assemblage was in relatively poor condition, being highly fragmented and also suffering from a high degree of root etching. As a consequence, only 17.5 % of the assemblage (25 fragments) was recordable. In addition a large proportion of the identifiable assemblage, (28 % or seven specimens) comprised of loose teeth. This reaffirms the poor condition of the assemblage and highlights careful recovery, as teeth are the most durable of elements, but are easily overlooked during excavation.

Due to the very small number of identifiable fragments, only very limited comments can be made about economy and depositional practice in the Iron Age community at Winnall Down II. The taxon with the highest number of identified specimens in the assemblage was cattle, of which there were nine fragments followed by sheep, horse and pigs and red deer (Fig. 12). These findings are mirrored by the 'minimum number of individuals' analysis (Fig. 13). Cattle had an MNI of three, with proximal right radii being the most common element part. Sheep had an MNI of two based on the MNE for met-

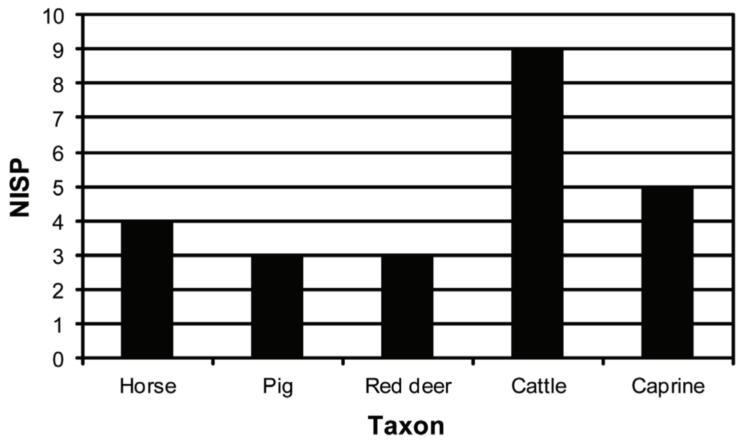


Fig 12 Number of identified specimens of different taxa

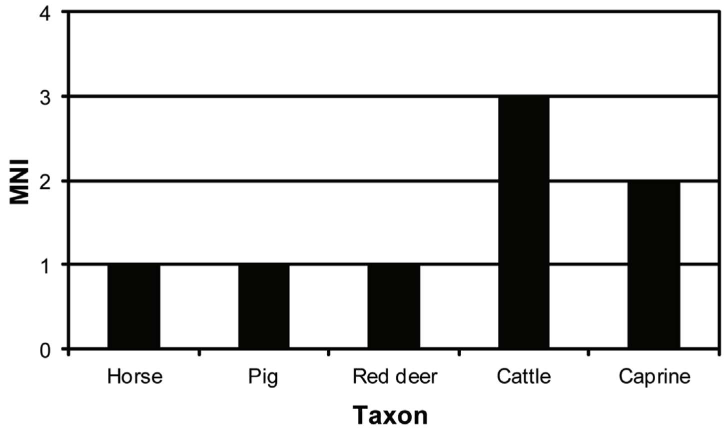


Fig 13 Minimum number of individuals of each taxon

atarsals, of which there were two right distal diaphyses.

Due to the small sample size, only brief comments can be made about age representation. The two cattle specimens for which fusion data could be obtained were fused, in each case indicating individuals of over 12 months. In addition the single ageable cattle tooth derived from an individual of between 30 and 36 months. Age data was also available for three horse specimens. A fused proximal scapula was from an individual of at least nine months and a proximal first phalanx was from an individual of older than twelve months. In addition measurements showed that a lower molar was from an individual of over 17 years of age. Sex could not be assigned to any of the specimens.

Evidence of pre-depositional taphonomic modification was rare within the assemblage. This is partially as a result of the poor condition of the remains, as the severe root etching would act to obscure more subtle modifications such as trampling, gnawing, abrasion, knife cutting and the early stages of weathering. Weathering

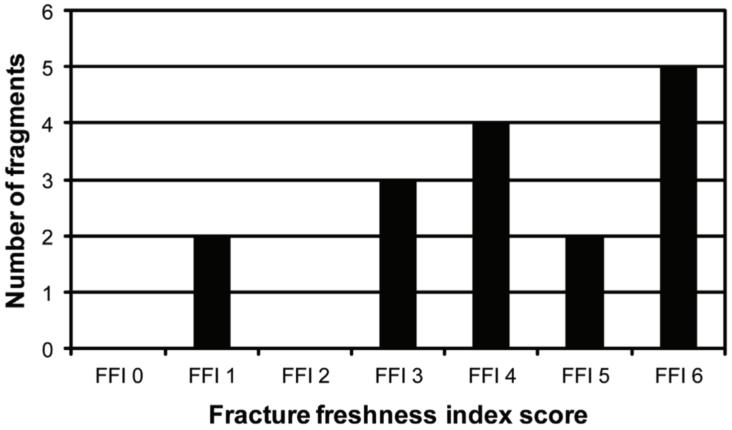


Fig 14 Number of scored fragments in each fracture freshness index category

was the most common modification, with four cattle specimens and one pig, one red deer and one horse specimen exhibiting stage one weathering. There were no more advanced examples of weathering within the assemblage. One pig and one horse specimen showed evidence of abrasion and one caprine and one horse specimen has been gnawed. Trampling, butchery and burning were entirely absent in the assemblage. The presence of modification, particularly weathering and gnawing provides evidence that at least some of the assemblage underwent a period of sub-aerial exposure prior to incorporation into a forming deposit and therefore may have been re-deposited.

Fracture freshness analysis revealed that the majority of specimens had advanced scores, with eleven fragments scoring between four and six compared to only five between zero and three (Fig. 14). Outram (2001) used the method to identify marrow and grease exploitation, although it is in fact indicative of fresh/green or dry bone breakage. Scores of zero are indicative of a bone that was broken when totally fresh, with specimens scoring three having been fractured when quite fresh, but with some degree of drying, either through boiling or exposure. This stage is consistent with marrow extraction, as ethnographic studies have demonstrated that marrow extraction involves a degree of heating (Outram 2001). Six on the fracture freshness index indicates a fully dried break which may have occurred post-deposition or after a substantial period of exposure. In such a small assemblage, the interpretative potential of this analysis is limited, although results indicate that the majority of breaks in long bones within the assemblage are very likely to have occurred after a substantial degree of drying, and may have occurred post-deposition or through processes such as trampling after a period of sub-aerial exposure. These results may be indicative of much of the material having been re-deposited. By contrast breaks on five fragments occurred when bones were in a fresher state, although it is unlikely that these bones were exploited for marrow, as all of those with a score of three were from caprines or medium sized taxa. Limb elements from these taxa would yield an insubstantial quantity of marrow.

Skeletal material was far more common and recovered in far greater density from the enclosure ditch. Only two unidentified medium-sized long bone splinters were recovered from features within the enclosure (from Trench 4), compared to 141 fragments deriving from the enclosure ditch (Trenches 1 and 2). After initial analysis, a potential contrast was also notable between the density of skeletal material in Trench 1 and Trench 2. Assessing density of fragments is problematic, however, as certain skeletal elements such as those from the cranium are more susceptible to fragmentation than long bones and therefore one skull could easily fragment into 100 pieces whereas a long bone is likely to fragment into a far smaller number. Trench 1 yielded 55 fragments compared to 97 fragments from Trench 2. However 47 unidentifiable fragments derived from the same context as a fragmentary cattle cranium in Trench 2 and many are likely to have derived from this skull. Consequently there is little evidence for a substantial contrast between the densities of fragments in the two trenches.

The possible structured deposit of an incomplete cattle skull in Trench 2 displays little evidence of having been treated differently from the rest of the assemblage. The cranium exhibits stage-one weathering evidence, and is therefore likely to have been exposed for a period prior to deposition, although this is relatively common within the assemblage. Skulls are vulnerable to smashing, through processes such as trampling when exposed at surface level, whereas this specimen (although somewhat fragmentary) has retained its hollow, near spherical shape. Therefore it is possible that exposure occurred during a period of curation. As with the rest of the assemblage, the skull is severely root etched and consequently evidence of abrasion from handling during curation would be likely to have been obscured. Due to the poor condition of the material, however, no firm conclusions can be drawn.

The interpretation of husbandry strategies, relative taxon prevalence and variation in pre-depositional treatment is problematic on such a small number of specimens. However the dominance of cattle is not uncommon on Early Iron Age sites in Hampshire. The most obvious comparable assemblage is the Early Iron Age sample from the more extensive excavations at Winnall Down I, where cattle specimens (44.4 %) are also most numerous followed by caprines (37.4 %) (Maltby 1985). Pig and horse bones were also common at Winnall Down I, although a notable contrast between the two sites is the scarcity of red deer at Winnall Down I where only 3.3 % of the identified assemblage (five fragments) was from red deer compared to three fragments in the far smaller assemblage at Winnall Down II. However this contrast may result from chance sampling. The Early Iron Age sample from Easton Lane was also very small with only 19 specimens identified to taxon. Cattle and sheep/goat were once again the most common taxa with eight and seven fragments respectively (Maltby 1989). No red deer or pig bones were recovered from the site. Detailed taphonomic analysis is rarely undertaken in faunal data collection and consequently comparisons cannot be made regarding the prevalence of modifications. Although the aforementioned comparisons regarding taxon prevalence provide some indication of variation between sites, any interpretations must be qualified by the extremely small sample size of identified material at Winnall Down II.

## CONCLUSION

The work in August 2006 confirmed the presence of a second Iron Age enclosure, Winnall Down II, located 300m north-east of Winnall Down I. Winnall Down II is an oval enclosure measuring c. 100m across at its widest axis and covering an area of c 7,800 m$^2$. The magnetic gradiometer survey identified an entrance c. 7m wide in the south-west side. A second entrance possibly exists in the north-east angle, although the data quality here is poor. Other external features may also be ditches, probably part of a prehistoric field system that can be traced from aerial photographs. Part of the enclosure ditch is aligned upon a length of ditch, possibly a field boundary, running west to east.

Excavation revealed a ‘U’-shaped ditch just over 1m wide and 0.9 m deep. There was no evidence for a bank, but one presumably existed. The ditch was re-cut at least once, but there was little evidence of weathering, indicating that it was not open to the elements for any length of time. The ditch fill consisted mainly of thick deposits of chalk and burnt flint suggesting deliberate and rapid infilling. A limited investigation of 75 m$^2$ of the interior revealed an area of inter-cutting shallow scoops and pits, probably the result of chalk quarrying. Two post-holes were recorded suggesting the presence of structures.

The animal bone assemblage was small (143 fragments) and in relatively poor condition. Therefore only limited comments can be made about the economy, but the taxon with the highest number of identified specimens was cattle, followed by sheep, horse, pig and red deer. Cattle bones indicated two individuals of 12 months or more and another between 30 and 36 months of age. Two horses were young animals of between nine to twelve months; another older individual was over 17 years of age.

A large assemblage of flint, both worked and burnt, was also recovered. The majority of the worked flint had been poorly knapped to manufacture crude tools. Some of this flint was subsequently burnt and deposited in the upper fills of the enclosure ditch.

A small ceramic assemblage of 162 sherds was recovered, the majority from the enclosure ditch. It was dominated by round-bodied, decorated, red-finished, and burnished bowls, and a variety of plain shouldered, burnished and barrel profiled jars. The style of pottery is 'All Cannings Cross-Meon Hill' for which a date between the 5th and 3rd centuries BC would be acceptable. This date range is comparable to Phase 3 at Winnall Down I. Furrowed and scratch-cordoned bowls, indicative of the earlier parts of the Early Iron Age, are well represented at Winnall Down I, but not at Winnall Down II. This could indicate that Winnall Down I was already established when Winnall Down II was set out. Undecorated saucepan pottery was only poorly represented at Winnall Down I and its absence from the Winnall Down II assemblage suggests a cessation of activity within both enclosures by the Middle Iron Age.

If this is the case then it raises a number of questions about the social relationship between the people using the two enclosures. Over the last 20 years several archaeologists have suggested that enclosures symbolised the independence and isolation of the resident social group, the household (Hill 1995; 1996; Bowden & McOmish 1987; Thomas 1997). Hill has even suggested that such households would have necessarily controlled their own means of production and had an existence that was distinct, self-sufficient, and spatially discrete from the larger community. If the appearance of enclosures in the Early Iron Age was an expression of the independence of social groups, then why were two enclosures fitted into the same pre-existing field system?

One answer could be that Winnall Down II did not function as a settlement, but was complementary to the activities undertaken at Winnall Down I, perhaps serving as a paddock. Yet the pottery and animal bone, although limited, suggests domestic activity similar to other enclosed settlements in Wessex. A more likely scenario is that the construction of Winnall Down II was the result of a group moving out from Winnall Down I. Such 'budding off' may have been a strategy to resolve a dispute or as a result of population pressure, which led to an attempt to replicate the earlier enclosure. The south-westerly orientation of the entrance to Winnall Down II was possibly an attempt to conform to important cosmological concerns apparent at Winnall Down I, where the entrance also faced in this direction. It was also a clear visual reference to existing and historical relationships with people and place, and by fitting Winnall Down II into the same field system pattern, established a relation between place and community.

This arrangement also implies complex agreements over land apportionment and agricultural activities. It is too simplistic to consider enclosure boundaries as signifying economic or social isolation since as Moore (2007, 93) has argued, households clearly would have needed contact with external groups to facilitate biological and social reproduction and to carry out tasks beyond that of a small group. Enclosures therefore may have had more to do with emphasizing the household as the primary social unit rather than community isolation. The spatial association of the enclosures on Winnall Down therefore suggests corporate interdependence of households, especially concerning the management of the field systems surrounding them.

To fully understand Iron Age activity on Winnall Down we must get past the notion that settlements were self-contained units whose outer limits were marked by enclosure ditches. Indeed, Fasham *et al.* (1989, 56–8) recorded a number of pits containing Early Iron Age pottery to the northwest of Winnall Down I, suggesting activity beyond the limits of the enclosure. It is also important to mention that the Late Bronze Age ditch system surrounding the enclosures was still used and subsequently modified during the Early and Middle Iron Age. Taken together, it is perhaps more useful to consider Winnall Down as a combination of different locales in which people repeatedly came together at various times to perform a range of activities. The ditches and boundaries should then be regarded as delimiting only the nuclei of occupation, which were only parts of a larger system of settlement and activity.

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